



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,756	06/20/2006	Lothar Mueller	GK-ZEI-3294/50343.20315	2601
26418	7590	05/17/2007		
REED SMITH, LLP ATTN: PATENT RECORDS DEPARTMENT 599 LEXINGTON AVENUE, 29TH FLOOR NEW YORK, NY 10022-7650			EXAMINER GREECE, JAMES R	
			ART UNIT	PAPER NUMBER
			2873	
			MAIL DATE	DELIVERY MODE
			05/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p align="center">10/552,756</p>	<p>Applicant(s)</p> <p align="center">MUELLER ET AL.</p>	
	<p>Examiner</p> <p align="center">James R. Greece</p>	<p>Art Unit</p> <p align="center">2873</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/11/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2873

Detailed Action

Applicant cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Status of the Application

Claims 8-14 are pending in this application

If the applicant is aware of any prior art or any other co-pending application not already of record, he/she is reminded of his/her duty under 37 CFR 1.56 to disclose the same.

Drawings

There are no objections to applicant's drawings at this time.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 8-11, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Humphrey (USPAT 4,730,910).

In regard to claim 8, Humphrey teaches as claimed:

I. An optical system, such as for a fundus camera, which has a substantially coaxial illumination beam path and imaging beam path, (for details see Humphrey figure 1 where the illumination beam path and imagine beam path are displayed as coaxial)

Art Unit: 2873

II. A lens system of at least four lenses; (for details see Humphrey letters A, B, C, and D)

III. At least two lenses being tilted with respect to their optical axes relative to the illumination beam path and imaging beam path; (for details see Humphrey letters A, B, C, and D)

IV. Optical axes of said lenses and optical axis of the illumination beam path and imaging beam path lying in a plane; (disregarding the interpretation, all of these A-D optical axes are present in a vertical plane as viewable in figure 1)

V. At least two additional lenses being tilted with respect to their optical axes relative to the illumination beam path and imaging beam path; (for details see Humphrey letters A, B, C, and D)

VI. The optical axes of the two additional lenses and optical axis of the illumination beam path and imaging beam path lying in a second plane which intersects the first plane substantially along the optical axis of the illumination beam path and imaging beam path. (For details see figure 1, letters A-D)

In regard to claim 9, Humphrey teaches as claimed:

Wherein the first plane and the second plane extend substantially perpendicular to one another. (Examiner interprets this

Art Unit: 2873

claim in light of the interpretation applied to claim 8 so thus the plane including lens A is substantially perpendicular to that one including the illumination beam path)

In regard to claim 10, Humphrey teaches as claimed:

The optical axis of the illumination beam path and imaging beam path penetrates the lenses outside their optical axes. (For details see Humphrey figure 1 which includes a beam path outline which shows the claimed feature is included in Humphrey.)

In regard to claim 11, Humphrey teaches as claimed:

Wherein the optical axes of the lenses are arranged outside the beam bundle of the illumination beam path and imaging beam path. (For details see Humphrey figure 1 which includes a beam path outline which shows the claimed feature is included in Humphrey.)

In regard to claim 13, Humphrey teaches as claimed:

Wherein at least one of the lenses has an aspheric surface. (for details see figure 3G lens A as one of the examples in Humphrey.)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2873

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Humphrey (USPAT 4,730,910) as applied to claim 8 above, and further in view of Howell (USPAT 2,978,956).

In regard to claim 12 Humphrey fails to explicitly disclose as claimed:

The lenses comprise lens segments.

Art Unit: 2873

However Howell discloses lenses comprising lens segments (See Howell figure 1.)

It would have been obvious to one having ordinary skill in the art of lens device design at the time of the invention was made to utilize a lens or lenses comprising lens segments as taught by Howell in the device of Humphrey since Howell states in column 1, line 22-25 that such a modification would provide a lens system having broader spectral transmittance than is achievable through the employment of a standard lens single lens element.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Humphrey (USPAT 4,730,910).

In regard to claim 14, Humphrey fails to explicitly disclose the following as claimed:

Wherein at least one lens is replaced by a diffractive optical element.

However the examiner takes official notice to the fact that the use of diffractive elements is well known in the art of fundus camera design and would have been an obvious design choice for one having ordinary skill in the art. A reference supporting this notice is USPAT 2,586,973.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2873

The applicant states in line 6 of claim 8 "said lenses", however it is not clear to which two specific lenses the applicant refers since the applicant refers to four lenses in line 3.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Greece whose telephone number is 571-272-3711. The examiner can normally be reached on M-Th 7:30-6.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James R. Greece

Patent Examiner

571-272-3711


Scott J. Sugarman
Primary Examiner